

REMARKS

Claims 38, 41-43 have been canceled in favor of new claims 50-57. In particular, new claims 50-53 correspond to canceled claim 38, new claims 54-55 correspond to canceled claim 41; new claim 56 corresponds to canceled claim 42; and new claim 57 corresponds to canceled claim 43. No new matter has been added by virtue of the new claims.

At page 3 of the Action, the Examiner indicated that claims 38 and 41-43 would be allowable if re-written in independent form. New claims 50-57 have been re-written along lines of the allowable claims. Accordingly, new claims 50-57 should be in condition for allowance and such action is respectfully requested.

Pending claim 49 has been amended merely to improve claim clarity and not in response to any patentability issue raised by the Office. Language added to claim 49 has been added to the new claims as needed.

Double Patenting Rejection

Claims 25-29, 39, 40, 45, and 47-49 stand rejected as being unpatentable over claims 17 and 24 of USP 5,869,270 to Rhode et al. under the doctrine of obviousness-type double patenting. Applicants respectfully disagree with the rejection, particularly since none of the cited claims specify a “joining molecule” as recited in the present claims. The Office has noted this deficiency in the Action at pg. 3. However in the interest of furthering prosecution with the Office, Applicants submit herewith a terminal disclaimer.

Accordingly, withdrawal of the double patenting rejection is requested.

35 USC § 112, second paragraph

Claims 26, 29, 47 and 49 stand rejected as being indefinite for reciting element "B" in constructs "B-A-C" and "A-C-B" on grounds that said element "does not join A or C to anything else". Applicants respectfully traverse.

According to the specification, a "joining molecule" is a sequence of amino acid residues that can form a specific binding pair with another protein or polypeptide. For instance, see pg. 15, lines 6-16, of Applicants' specification reproduced below:

The term "**joining molecule**" as used herein in reference to a polyspecific MHC complex of the invention **refers to a protein or polypeptide that is capable of specifically binding and forming a specific binding pair, either covalently (e.g., by disulfide bonding) or non-covalently by hydrogen bonding with another protein or polypeptide**. Typically, a molecule which is specifically bound by the joining molecule is sometimes referred to herein as a second joining molecule, which second joining molecule is the same as, or is different from, the (first) joining molecule. Exemplary joining molecules include immunoglobulin constant chains (H or L) or suitable fragments thereof, as well as coiled-coil and helix-turn-helix motifs such as those described more fully below. Particularly, an Ig-C_L chain or suitable Ig-C_L chain fragment is one type of joining molecule.

Thus, the element "B" need not bind another element so long as it can form a specific binding pair (covalently or non-covalently) with another protein or polypeptide. Put another way, it is an object of the invention embodied by claims 26, 29, 47 and 49 to provide constructs where the joining molecule resides at an end of the construct without necessarily binding another element. Examples of suitable joining molecules are provided throughout the specification including immunoglobulin constant chains (H or L) or suitable fragments thereof, as well as coiled-coil and helix-turn-helix motifs. Other examples include an Ig-C_L chain or suitable Ig-C_L chain fragment is one type of joining molecule. See also pg. 39, lines 11-21 (disclosing certain leucine zipper motifs as potential joining molecules).

See also Figures 9A-9B (showing the Ig-C_L chain as a suitable joining molecule).

See also Example 14, particularly at section B, which discloses (among other things) how to make suitable “coil-coil” and “helix-turn-helix” joining molecules that can be positioned at an end of a MHC complex according to the claimed invention. See also pg. 112 of the specification at lines 11-15 which provide more specific examples of joining molecules positioned at the end of a particular MHC molecule.

In view of the guidance and description provided by the present specification, it is submitted that a worker reading the cited claims would understand what is meant by “joining molecule” as recited in claims 26, 29, 47, and 49. The phrase is abundantly clear. Accordingly, reconsideration and withdrawal of the rejection are requested.

CONCLUSION

It is believed the application is in condition for allowance, which action is earnestly solicited. If a telephone conversation with Applicants' agent would expedite the prosecution of the above-identified application, the examiner is urged to call the undersigned at (617) 439-4444.

Respectfully submitted,



Robert L. Buchanan (Reg. No. 40,927)
Intellectual Property Practice Group of
EDWARDS ANGELL PALMER & DODGE LLP
P.O. Box 55874
Boston, Massachusetts 02205
Tel.: 617.439.4444
Fax 617.439.4170

Customer No. 21874

Date: 22 Nov. 2008